

U.S. Department of the Interior  
Bureau of Land Management  
White River Field Office  
73544 Hwy 64  
Meeker, CO 81641

## ENVIRONMENTAL ASSESSMENT

**NUMBER:** CO-110-2004- 84 -EA

**CASEFILE/PROJECT NUMBER** (optional):

**PROJECT NAME:** 2004 Force Account Spring Construction

**LEGAL DESCRIPTION:** Joe Bush Spring, T1S, R95W Sec 35 SWSE;  
Timber Gulch Spring, T2S, R95W Sec 11 SWNW;  
East Segar Spring# 1, T1S, R95W, Sec 25 NWSW;  
East Segar Spring #2, T1S, R95W, Sec 26 NWSE;  
Middle Tschuddi Gulch Spring T3N, R96W, Sec 27 SESE.

**APPLICANT:** USDI-BLM

**ISSUES AND CONCERNS** (optional): N/A

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

**Proposed Action:** The proposed action is reconstruction/development of five (5) springs by the BLM Engineering Field Office Force Account crew using a JD 450 crawler tractor with a backhoe and hand labor. Four springs are within the Segar Gulch allotment (06008) and one spring, Middle Tschuddi Gulch spring, is within the Black's Gulch allotment (06612). Development of these spring sites will involve excavation and collection of the spring source and trenching and installation of a 2" diameter pipeline from the source to a tank location. Pipeline length will vary from 25 to 250 feet so that it will be "on grade"; that is, so that the spring will flow by gravity into the tank. The tanks will be either a "tire tank" with the inflow and overflow pipes coming up through a concrete plug in the center of the tank or a fiberglass tank with the inflow and overflow coming up the side of the tank. The tank location will be placed out of the drainage by building a pad of approximately 20' X 20' on the appropriate hillside. The spring source and collection box will be fenced with a buck and pole fence. For the Timber Gulch spring, the source will be piped on grade to the north and will run about 250 feet out on the east side of the drainage up onto a small bench. The development at Joe Bush spring will involve reconfiguration of the existing collection box so that a pump can be installed (12 Volt DC Solar) and construction of 1200 feet of pipeline to carry water from the spring to the existing stock pond on the Segar Gulch/Joe Bush divide, NNE of the spring. After backfilling, the pipeline route will be recontoured and waterbarred so that it can not be used as a road/four wheeler trail.

All disturbed areas will be recontoured and seeded with Native seed mix #6. The work will be completed in late June and July of 2004.

**No Action Alternative:** Under this alternative, the springs would not be developed or reconstructed.

**ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:** No other alternatives were considered.

**NEED FOR THE ACTION:** Maintenance and effective operation of springs on the uplands is a key factor in meeting the Standards for Rangeland Health through managed livestock grazing. Protection of the spring sources with effective, long lasting fencing is also necessary to meet BLM's stated riparian objectives. WRFO plans to work on five springs in June and July 2004, so that they are fully functional and the sources are properly protected.

**PLAN CONFORMANCE REVIEW:** The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Livestock Grazing, Range Improvements, p 2-25

Decision Language: Range improvements are necessary to control livestock use and improve rangeland condition.

### **AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:**

**STANDARDS FOR PUBLIC LAND HEALTH:** In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

### **CRITICAL ELEMENTS**

#### **AIR QUALITY**

*Affected Environment:* There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action.

*Environmental Consequences of the Proposed Action:* Impacts from the proposed action are not anticipated.

*Environmental Consequences of the No Action Alternative:* Impacts from not permitting the area wide pesticide permit are not anticipated.

*Mitigation:* No additional mitigation is needed.

## **CULTURAL RESOURCES**

*Affected Environment:* Joe Bush Spring; Timber Gulch Spring; East Segar Spring # 1; East Segar Spring #2 and Middle Tschuddi Gulch Spring have been inventoried at the Class III level (100 % pedestrian) level (Elliott May 30-June 4). No cultural resources were found in the areas (Joe Bush Spring, T1S, R95W Sec 35 SWSE; Timber Gulch Spring, T2S, R95W Sec 11 SWNW; East Segar Spring# 1, T1S, R95W, Sec 25 NWSW; East Segar Spring #2, T1S, R95W, Sec 26 NWSE); inventoried. No recorded sites were found in the literature search in these areas.

*Environmental Consequences of the Proposed Action:* The proposed action will not affect any cultural resources known to exist in areas inventoried of Joe Bush Spring; Timber Gulch Spring; East Segar Spring # 1; East Segar Spring #2.

*Environmental Consequences of the No Action Alternative:* There will be no impacts to cultural resources under the No Action Alternative.

*Mitigation:* 1. Keep pipeline used in the development of all springs “on grade” as stated in the proposed action and in accordance with the area surveyed for the presence of cultural resources.

2. The project leader is responsible for informing all persons who are associated with development operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the project lead wishes, at any time, to relocate activities to avoid the expense of mitigation

and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

## **INVASIVE, NON-NATIVE SPECIES**

*Affected Environment:* There are no known noxious weeds or problem weeds at the spring development sites. The problem weed bull thistle (*Cirsium vulgare*) is known to occur in the drainages below the East Segar springs.

*Environmental Consequences of the Proposed Action:* Spring development as proposed will create earthen disturbance, which if left unrevegetated could provide safe sites for the establishment of noxious and problem weeds. While spring reconstruction will have no direct local impact on noxious weeds or invasive species, on a watershed and landscape scale, spring development, through its effect in enhancing livestock distribution, will have a positive impact on plant communities by increasing their resilience to noxious/invasive species establishment and proliferation.

*Environmental Consequences of the No Action Alternative:* There will be no impact.

*Mitigation:* Revegetate all disturbed areas and monitor the sites for a minimum of three years post disturbance to insure that no noxious and/or invasive species establish on site. Eradicate all noxious weeds which occur onsite using materials/methods approved by the Authorized Officer.

## **MIGRATORY BIRDS**

*Affected Environment:* A large number of migratory birds fulfill nesting functions throughout the mountain and mixed shrublands encompassing the proposed projects during the months of May, June, and July. Species associated with these shrubland communities are typical and widely represented in the Resource Area and region. Those birds occurring in the project areas that have been identified as having higher conservation interest (i.e., Rocky Mountain Bird Observatory, Partners in Flight program) are listed in the following table. These birds are typically well distributed at appropriate abundance in extensive suitable habitats.

Birds with High Conservation Priority by Habitat Association

<b>Sagebrush and mixed shrub</b>	<b>Mountain shrub</b>
Brewer's sparrow green-tailed towhee	blue grouse Virginia's warbler

*Environmental Consequences of the Proposed Action:* Construction-related disruption of nest attempts would most likely occur within the 0.5 acre surrounding each spring site and along the pipeline corridors. Total habitat disturbed by the proposed action would amount to less than 5 acres and, assuming 2 sites would be constructed prior to completion of nesting functions (mid-July), likely involve less than 5 pair of birds. Birds occupying these narrow upland valleys are generally sagebrush or mixed shrub associates (e.g., vesper sparrow and green-tailed towhee), which are abundant and widely distributed in this Resource Area. Overland equipment travel could ostensibly physically destroy nests or damage nest substrate, but the likelihood of involving any but a very few nests, is low. Equipment passage would be short term and transient and would have little effective influence on nest outcomes.

*Environmental Consequences of the No Action Alternative:* There would be no equipment travel or spring construction activity that could disrupt breeding bird efforts.

*Mitigation:* None.

#### **THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)**

*Affected Environment:* There is no listed, proposed, candidate, or BLM-sensitive animals known to inhabit or derive important indirect benefit from these diminutive upland spring sources.

*Environmental Consequences of the Proposed Action:* Spring development activities would have no conceivable influence on any population of, or habitat associated with, special status species.

*Environmental Consequences of the No Action Alternative:* Leaving these springs in their current state would have no conceivable influence on any population of, or habitat associated with, special status species.

*Mitigation:* None.

*Finding on the Public Land Health Standard for Threatened & Endangered species:* Because there are no special status species associated with the proposed project locales, the proposed action has no relevance to the public land health standards for T&E species.

#### **THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a finding on Standard 4)**

*Affected Environment:* There are no threatened, endangered or sensitive plant species occurring within the project area.

*Environmental Consequences of the Proposed Action:* None

*Environmental Consequences of the No Action Alternative:* None

*Mitigation:* None

*Finding on the Public Land Health Standard for Threatened & Endangered species:*  
There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive plant species. Thus, there would be no effect on achieving the land health standard.

## **WASTES, HAZARDOUS OR SOLID**

*Affected Environment:* There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at this site.

*Environmental Consequences of the Proposed Action:* No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated.

*Environmental Consequences of the No Action Alternative:* No hazardous or other solid wastes would be generated under the no action alternative.

*Mitigation:* The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

## **WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)**

*Affected Environment:* A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was one to see if any water quality concerns have been identified. The State has classified the drainages these springs contribute to as "Use Protected" reaches. Their designated beneficial uses are: Warm Aquatic Life 2, Recreation 2, and Agriculture. The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For these reaches, minimum standards for three parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0 and Fecal Coliform = 2000/100ml and 630/100 ml E. coli.

*Environmental Consequences of the Proposed Action:* Impacts to hydrology and water quality from development of these springs and pipelines would be similar to other surface disturbing activities. Some of these impacts would be exposure of soil surface to wind and water erosion and reduced water quality due to erosion of disturbed areas. These impacts would be short term until re-vegetation has occurred.

*Environmental Consequences of the No Action Alternative:* Impacts are not anticipated from the no-action alternative.

*Mitigation:* 1) Water developments (springs, reservoirs, catchments, wells, pipeline, and water troughs) will conform to BLM Manual H 1741-2.

2) Cuts, fills, and excavations shall be dressed and blended with surroundings. Pipelines will be buried where possible. Vegetation will be established on disturbed areas.

*Finding on the Public Land Health Standard for water quality:* : Implementation of the proposed action would not cause water quality to be outside the standards set by the State of Colorado, which is the standard for water quality on public lands.

## **WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)**

*Affected Environment:* About 300 to 1200 feet of the steep and narrow drainages below the springs planned for development supports a healthy herbaceous riparian community consisting of sedges and rushes in a narrow band along the consolidated shale streambeds. The stream channels and riparian communities are relatively undisturbed by livestock and big game except for 30-50 feet below the spring sources which are heavily trampled.

*Environmental Consequences of the Proposed Action:* The development of the springs as proposed is expected to result in a significant decrease in the use of the drainage bottom at and below the spring sources by livestock. This, combined with the availability of water at a tank location out of the drainage, should result in an improvement in riparian expression at all spring sites proposed for development.

*Environmental Consequences of the No Action Alternative:* There will be no change from the present situation.

*Mitigation:* The overflow for the developed tank sites at each spring location will be returned to the stream channel.

*Finding on the Public Land Health Standard for riparian systems:* Riparian systems at the proposed development sites currently marginally meet the standard. Implementation of the proposed action will result in improvement so that the Standard will be exceeded both at the development sites and in general, in the individual pastures in which these developments are implemented

## **CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:**

No ACEC's, flood plains, prime and unique farmlands, Wilderness Study Areas, or Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

## **NON-CRITICAL ELEMENTS**

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

### **SOILS** (includes a finding on Standard 1)

*Affected Environment:* Soils in the spring development areas are primarily loams, channery loams and clay loams formed in place from sandstone and shale parent material. These soils vary from shallow to moderately deep and are generally well drained. The predominate range sites are Loamy slopes at the Piceance spring sites and Clayey Foothills for the Middle Tschuddi site.

*Environmental Consequences of the Proposed Action:* Spring reconstruction and development will result in some short-term soil disturbance. The minor disturbance associated with spring development will be offset by long term enhancement of soil stability on the landscape as a result of more optimum livestock distribution in the pastures of the affected allotments.

*Environmental Consequences of the No Action Alternative:* There would be no change from the present situation of little or no onsite disturbance.

*Mitigation:* Promptly revegetate all disturbed areas with seed of native species adapted to the site and monitor the spring development sites for a minimum of three years post construction to insure that no noxious weeds establish on site.

*Finding on the Public Land Health Standard for upland soils:* Upland soils in the area of the proposed project currently meet or exceed the Standard. Development/reconstruction of the springs as proposed, by improving livestock distribution, should enhance our ability to meet or exceed the upland soil Standard in the future.

### **VEGETATION** (includes a finding on Standard 3)

*Affected Environment:* Upland vegetation at the spring sites is primarily a mixed mountain shrub type comprised of mountain big sagebrush, Utah serviceberry, mountain mahogany and Gambel oak with a diverse understory of grasses and forbs. The typical



ecological site is loamy slopes. Vegetation in and around the spring sites is a mixture of herbaceous species adapted to wetland sites including Nebraska sedge and redtop. Typically, the immediate bottom of the drainages is shaley. These areas tend to be barren. Herbaceous vegetation is present on those places in the drainage which have soil substrate.

*Environmental Consequences of the Proposed Action:* Spring reconstruction and thus, function, is critical to meeting Public Land Health Standards 1(Uplands), 2(Riparian), and 3 (Plants and Animals). Briefly, the proper functioning of upland water developments such as these will aid in attaining proper livestock distribution, the overall effect of which will enable us to meet Standards 1, 2 and 3 on the rangelands in the area of the affected springs. There will be some disturbance at each spring location but this will be short term and will be offset by the benefit of a functional water development at each location. Proper fencing and return of overflow to the existing channel will also aid in achieving Public Land Health Standard 2, Riparian Systems.

*Environmental Consequences of the No Action Alternative:* There would be no change from the present situation of a less than properly functional spring development which does not aid in proper livestock distribution.

*Mitigation:* Revegetate all disturbed areas use the seed of native species (Native seed mix #2) adapted to the site and monitor the sites for a minimum of three years post disturbance to prevent the establishment of noxious and invasive species.

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Plant communities in the area of the proposed spring developments are meeting the standard. The proposed action, by enhancing managed livestock grazing should enable us to continue to meet the Standard in the future.

## **WILDLIFE, AQUATIC (includes a finding on Standard 3)**

*Affected Environment:* These low production springs and their subtending channels are not presently or potentially capable of supporting even rudimentary aquatic communities. Their contribution to downstream systems could be considered incremental, but realistically insignificant.

*Environmental Consequences of the Proposed Action:* Spring development would have little, if any, influence on production or eventual downstream contribution of water to downstream systems.

*Environmental Consequences of the No Action Alternative:* Leaving the springs in their current condition would have little, if any, influence on production or eventual downstream contribution of water to downstream systems.

*Mitigation:* None

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Terrestrial): These small spring systems are incapable of supporting an aquatic system and, as such, the public land health standards for aquatic habitats cannot be meaningfully applied to the proposed action.

## **WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

*Affected Environment:* These spring sites are used variously by big game as a water source throughout the year. Springs associated with the Segar Gulch Allotment are situated in higher elevation mountain big sagebrush and mixed shrub sites that receive substantial big game use during the summer and fall months. The Middle Tschuddi spring site is associated with lower elevation ranges that are used by big game primarily during the fall and winter months. There are no existing forms of vehicle access into these spring sites.

Blue grouse are relatively common across the top of Joe Bush and Segar Mountains during the nesting and brood-rearing season. Flocks of up to 40 birds have been flushed from local ridgelines in October, likely representing the gathering of local broods prior to their return to nearby Douglas-fir stands for the winter season. Nesting commences in mixed sagebrush and serviceberry shrublands in mid to late April with most broods complete by late June. Nest success and brood survival are influenced positively by well-developed herbaceous ground cover. The availability of supplemental herbaceous ground cover intermingled with woody cover enhances microclimatic conditions at the nest site as well as aiding in nest and brood concealment through mid August.

The abundance and composition of nongame bird communities associated with these allotments' predominantly and mountain shrub and mixed shrub communities are considered representative and complete with no obvious deficiencies in composition. Small mammal populations and distribution is poorly documented, however, the 6 or 7 species potentially occurring on these allotments are widely distributed throughout the State and the Great Basin or Rocky Mountain regions. All of these upland associated species display broad ecological tolerance and are documented from habitats ranging from foothill to alpine sites. No narrowly distributed or highly specialized species or subspecific populations are known to occur in these allotments.

*Environmental Consequences of the Proposed Action:* The redevelopment of these springs would have little effective influence on the availability or quantity of water for seasonal big game use. However, development of reliable water sources is viewed as an important grazing management tool that allows more consistent application of deferrals and rotations that have been designed to improve residual ground cover and understory density and composition—features that complement the utility of wildlife habitat offered by these shrublands.

By providing additional upland water sources in the Segar Mountain pasture, grazing use intensity in the vicinity of the waters would increase. Use during June and July would be expected to progressively reduce the density and height of herbaceous ground cover coincident with reproductive seasons of resident small game and nongame wildlife. Although this represents a localized adverse impact, in a larger sense, widening livestock distribution within the pasture

would help moderate use in current areas of concentration (especially mesic swales and the very confined bottomlands along Segar Gulch) and reduce overall intensity throughout the pasture, such that the overall suitability and utility of wildlife cover and forage derived from herbaceous ground cover would remain static or improve slightly. Reducing use intensity during the growing season should contribute to improvement in the vigor and composition of native grasses and forbs—a longer term influence that would be expected to enhance post-grazing plant recovery (e.g., redevelopment of ground cover for small mammal winter use/grouse and deer fall use) and promote plant assemblages that are accepted as providing enhanced forage and cover properties for these wildlife communities.

Wildlife effects attributable to the development of the Joe Bush spring were addressed in detail in EA 03-25. In summary, the area within 0.5 mile of the source and pits are less suited as blue grouse nest and brood habitat. The adjacent Joe Bush pasture offers superior nest and brood habitat on its more extensive, moderately sloped sagebrush/serviceberry ridgelines. Lack of appropriate water availability and distribution in the Segar pasture can force earlier entry into the Joe Bush pasture, use in which is normally deferred until early August (i.e., grazing initiated outside nesting and early brood period and well into later brood period), thereby failing to more fully take advantage of wildlife benefits gained through planned deferrals.

Since the water source already exists, there would be no notable alteration of grazing intensity in the Joe Bush pasture. However, by providing a concentrated source of water outside the channel, it is expected that the persistence and severity of trampling damage in the spring channel would be reduced. Relieving damage to in-channel and adjacent moist soil areas should prompt localized and downstream improvements in succulent growth used as a direct and indirect source of forage to all area wildlife, but especially late summer and fall use by deer and grouse.

The use of vehicles to develop these spring sites will necessarily involve overland travel. The tracks left after temporary access invariably draws subsequent vehicular use and tends to permanently establish a roadbed. In the interest of minimizing big game impacts associated with vehicle use (e.g., heightened behavioral avoidance and indirect habitat loss with increasing road density and use), the Resource Area has established road density objectives for big game habitats. In the course of project work, it is the policy of BLM to minimize, where practicable, the creation of such trails and roads. It is expected that special effort may be required to effectively mask or effectively rehabilitate temporary construction access associated with this project (see mitigation below).

Providing an out-of-channel water source and promoting vegetation expression in these spring channels via fencing, would provide a limited amount of supplemental herbaceous cover and forage substrate (herbage, seeds and invertebrate substrate) for those non-game and small game animals inhabiting adjacent upland habitats.

*Environmental Consequences of the No Action Alternative:* The no-action alternative would have no influence on the availability of water for wildlife use. It is presumed that channel vegetation and the very limited amount of wildlife use associated with these sites would remain unchanged under this alternative. Failure to fence spring sources at the project sites would forego an opportunity to prompt development of riparian cover at and below the spring site.

This alternative would provide no relief of grazing/trampling damage in the channels or bottomlands associated with the spring channels or larger subtending valleys (e.g., Segar Gulch). This alternative would provide no mechanism to moderate overall livestock grazing effects in the Segar Mountain pasture, but about 50 acres suitable for grouse nesting and brood rearing activities would remain grazed at current (i.e., lower than proposed action) levels through the early summer months. Conversely, about 200 acres of shrubland habitat in the Joe Bush pasture, presumably better suited to grouse nesting and brood rearing functions, may be subjected more frequently to livestock use during the late nest/early brood period.

*Mitigation:* The following recommendations are consistent with RMP decisions as found in the ROD, page 2-14, last partial paragraph and page 2-15, last 2 full paragraphs in 1<sup>st</sup> column.

It is recommended that temporary construction access be limited to the minimum number of overland crawler tractor trips necessary to transport spring development materials, and avoiding improvements (e.g., vegetation clearing and the development of defined travel bed) that would allow wheeled vehicle travel to these spring sites. In the event construction access leaves a residual means for vehicle travel, sufficient native woody material will be placed on this trail to effectively deter further vehicular use.

*Finding on the Public Land Health Standard for plant and animal communities* (partial, see also Vegetation and Wildlife, Aquatic): Uplands associated with the proposed action generally meet the public land health standards for animal communities. The proposed action would, by incrementally moderating overall use intensity on herbaceous ground cover and facultative riparian growth along spring channels, enhance the development of herbaceous understories that big game, small game, and nongame alike derive important values as forage and cover.

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation		X	
Cadastral Survey	X		
Fire Management	X		
Forest Management	X		
Geology and Minerals	X		
Hydrology/Water Rights			X
Law Enforcement		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations	X		
Recreation		X	
Socio-Economics		X	

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Visual Resources		X	
Wild Horses	X		

## HYDROLOGY AND WATER RIGHTS

*Affected Environment:* Listed in the table below are hydrologic parameters recorded for the proposed springs. No information is available for the Middle Tschuddi Gulch spring.

Drainage	Twp	Rng	Quarter	Sec#	Map Code	SC	pH	Classification	GPM
Joe Bush	1S	95W	SWSE	35	161-08	2032	7.9	Perennial	2.5
Segar Mtn	1S	95W	NW SE	26	161-52	1053	7.8	Seasonal	3.3
Segar Mtn	1S	95W	NWSW	25	161-51	2200	7.9	Perennial	24
Timber Gulch	2S	95W	SWNW	11	161-58	677	8	Perennial	0.97
Tschuddi	3N	96W	NENE	27	-----	-----	--	No Record	---

*Environmental Consequences of the Proposed Action:* Impacts to hydrology from development of these springs and pipelines would be similar to other surface disturbing activities. Some of these impacts would be exposure of soil surface to wind and water erosion and reduced water quality due to erosion of disturbed areas. These impacts would be short term until re-vegetation has occurred.

*Environmental Consequences of the No Action Alternative:* No changes are expected in the condition of the springs.

*Mitigation:* 1) An inventory needs to be done on these springs in preparation for securing water rights. Since BLM doesn't hold water rights on these springs, filing on these springs must be done to protect the public's investment.

2) Actual work in spring and stream beds will be done by hand where possible.

3) The source of all spring developments shall be fenced.

## PALEONTOLOGY

*Affected Environment:* Joe Bush Spring; Timber Gulch Spring; East Segar Spring # 1; East Segar Spring #2; and Middle Tschuddi Gulch Spring are in the Class I geologic units of the Uinta Formation and the Parachute Creek Member of the Green River; these areas are unlikely to produce recoverable fossils.

*Environmental Consequences of the Proposed Action:* The proposed action does not appear to have the potential to impact scientifically important fossils

*Environmental Consequences of the No Action Alternative:* There would not be any impacts to fossil resources under the No Action Alternative.

*Mitigation:* If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

## **RANGELAND MANAGEMENT**

*Affected Environment:* Joe Bush spring is in the Joe Bush pasture of the Segar Gulch allotment (06008). Both East Segar Gulch springs are in the Segar Gulch pasture of the Segar Gulch allotment (06008). Both of these pastures are used by Grady Land and Livestock in a two pasture deferred rotation grazing system. At the present, the lack of a functional spring development in East Segar Gulch is not conducive to proper livestock distribution in that part of the Segar Gulch pasture. The Timber Gulch spring, once the Timber riparian fence is relocated, will be usable as part of the Bear Ridge pasture. The Bear Ridge pasture is in the Segar Gulch (06008) allotment and is used in the late summer by the Shults livestock operation as part of a three pasture deferred rotation grazing system. The Middle Tschuddi spring is within the summer range of the northwest part of the Black's Gulch allotment (06612). This allotment is utilized from May through October as part of Sam Love's cattle operation.

*Environmental Consequences of the Proposed Action:* Collection and tanking of the springs as proposed will improve livestock distribution in the respective allotments/pastures where the springs are being developed. Placement of the water tank up out of the drainages at the various spring locations will eliminate the need for cattle to go down in the drainage. Cattle will be able to trail into a tank to drink and if they loaf after drinking, it will be around the tank and not in the bottom of the drainage. Spring reconstruction and thus, function, is critical to meeting Public Land Health Standards 1(Uplands), 2(Riparian), and 3 (Plants and Animals). Briefly, the proper functioning of upland water developments such as these will aid in attaining proper livestock distribution, the overall effect of which will enable us to meet Standards 1, 2 and 3 on the rangelands in the area of the affected springs. There will be some disturbance at each spring location but this will be short term and will be offset by the benefit of a functional water development at each location. Proper fencing and return of overflow to the existing channel will also aid in achieving Public Land Health Standard 2, Riparian Systems.

*Environmental Consequences of the No Action Alternative:* There will be no change from the present situation of a lack of dependable watering sources in the affected pastures and thus, less than desirable livestock distribution.

*Mitigation:* Revegetate all disturbed areas using the seed of native species adapted to the site and monitor the sites for a minimum of three years post disturbance to prevent the establishment of noxious and invasive species.

**CUMULATIVE IMPACTS SUMMARY:** Development of the subject springs would have the long-term cumulative impact of enhancing riparian expression in the affected allotments.

**PERSONS / AGENCIES CONSULTED:**  
**INTERDISCIPLINARY REVIEW:**

<b>Name</b>	<b>Title</b>	<b>Area of Responsibility</b>
Caroline Hollowed	Hydrologist	Air Quality
Tamara Meagley	NRS	Areas of Critical Environmental Concern
Tamara Meagley	NRS	Threatened and Endangered Plant Species
Gabrielle Elliott	Archaeologist	Cultural Resources Paleontological Resources
Mark Hafkenschiel	Rangeland Management Specialist	Invasive, Non-Native Species
Ed Hollowed	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Marty O'Mara	Hazmat Collateral	Wastes, Hazardous or Solid
Caroline Hollowed	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Mark Hafkenschiel	Rangeland Management Specialist	Wetlands and Riparian Zones
Chris Ham	ORP	Wilderness
Mark Hafkenschiel	Rangeland Management Specialist	Soils
Mark Hafkenschiel	Rangeland Management Specialist	Vegetation
Chris Ham	ORP	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Mark Hafkenschiel	Rangeland Management Specialist	Rangeland Management
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	ORP	Recreation
Chris Ham	ORP	Visual Resources
Valerie Dobrich	NRS	Wild Horses

# **Finding of No Significant Impact/Decision Record (FONSI/DR)**

**CO-110-2004-084-EA**

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE:** The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

**DECISION/RATIONALE:** It is my decision to implement the Force Account construction/reconstruction of these springs as proposed because this action will have a net beneficial impact on the soils and plant communities of the affected allotments.

**MITIGATION MEASURES:** 1. Keep pipeline used in the development of all springs “on grade” as stated in the proposed action and in accordance with the area surveyed for the presence of cultural resources.

2. The project leader is responsible for informing all persons who are associated with development operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the project lead wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone,



with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

4. Revegetate all disturbed areas and monitor the sites for a minimum of three years post disturbance to insure that no noxious and/or invasive species establish on site. Eradicate all noxious weeds which occur onsite using materials/methods approved by the Authorized Officer.

5. The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

6. Water developments (springs, reservoirs, catchments, wells, pipeline, and water troughs) will conform to BLM Manual H 1741-2.

7. Cuts, fills, and excavations shall be dressed and blended with surroundings. Pipelines will be buried where possible. Vegetation will be established on disturbed areas

8. The overflow for the developed tank sites at each spring location will be returned to the stream channel.

9. Promptly revegetate all disturbed areas with Native seed mixture # 2 and monitor the spring sites for a minimum of three years post construction for the occurrence noxious and problem weeds.

10. The following recommendations are consistent with RMP decisions as found in the ROD, page 2-14, last partial paragraph and page 2-15, last 2 full paragraphs in 1<sup>st</sup> column.

It is recommended that temporary construction access be limited to the minimum number of overland crawler tractor trips necessary to transport spring development materials, and avoiding improvements (e.g., vegetation clearing and the development of defined travel bed) that would allow wheeled vehicle travel to these spring sites. In the event construction access leaves a residual means for vehicle travel, sufficient native woody material will be placed on this trail to effectively deter further vehicular use.

11. An inventory will need to be done on these springs in preparation for securing water rights. Since BLM doesn't hold water rights on these springs, filing on these springs must be done to protect the public's investment.

12. Actual work in spring and stream beds will be done by hand where possible.

13. The source of all spring developments shall be fenced.

14. If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized

officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

**COMPLIANCE/MONITORING:** Segar Gulch and Black's Gulch rangeland monitoring studies.

**NAME OF PREPARER:** Mark Hafkenschiel 6/22/04

**NAME OF ENVIRONMENTAL COORDINATOR:** *Chapelwood 6/22/04*

**SIGNATURE OF AUTHORIZED OFFICIAL:** *Thom F. Walton*  
Field Manager

**DATE SIGNED:** *6/22/04*

**ATTACHMENTS:** Map of the Location of the Proposed Action.

## Location of Proposed Action CO-110-2004-084-EA

